We claim:

1. A method of treating or preventing symptoms associated with aging comprising the step of inducing protein expression, nuclear localization, or both protein expression and nuclear localization of FoxM1B in a target cell.

2. The method of claim 1, wherein protein expression, nuclear localization, or both protein expression and nuclear localization of FoxM1B is induced by contacting the target cell with a growth factor or a cytokine.

3. The method of claim 2, wherein the growth factor is human growth hormone, hepatocyte growth factor, epidermal growth factor, transforming growth factor α or a growth factor that induces Ras-MAP kinase signaling.

4. The method of claim 2, wherein the cytokine is tumor necrosis factor α, interleukin 6 (IL-6), IL-1α, or IL-1β.

5. The method of claim 1, wherein the target cell expresses endogenous FoxM1B protein.

6. The method of claim 1, wherein the target cell comprises a recombinant nucleic acid construct comprising a nucleotide sequence that encodes a protein having an amino acid sequence identified by SEQ ID NO: 2 operatively linked to a control sequence, wherein target cells produce FoxM1B protein thereby.

7. The method of claim 6, wherein the nucleotide sequence is identified by SEQ ID NO: 1.

8. The method of claim 6, wherein the recombinant nucleic acid construct is a vector.

9. The method of claim 6, wherein the recombinant nucleic acid construct is a viral vector.

10. The method of claim 9, wherein the viral vector is an adenovirus vector, an adeno-associated virus vector, a retrovirus vector, herpes simplex virus vector, or vaccinia virus vector.

11. The method of claim 6, wherein the recombinant nucleic acid construct is delivered to the target cell within a liposome.

12. The method of claim 1, wherein the aging is premature aging.

13. The method of claim 12, wherein the premature aging is caused by a disease.

14. A method of preventing or amelioriating the effects of an age-related disease or age-related proliferation disorder in a patient comprising the step of inducing expression, nuclear localization, or both expression and nuclear localization of FoxM1B protein in a target cell.

15. The method of claim 14, wherein expression, nuclear localization, or both expression and nuclear localization of FoxM1B is induced by contacting the target cell with an effective amount of a growth factor or a cytokine.

16. The method of claim 15, wherein the growth factor is human growth hormone, hepatocyte growth factor, epidermal growth factor, transforming growth factor α, or a growth factor that induces Ras-MAP kinase signaling.

17. The method of claim 15, wherein the cytokine is tumor necrosis factor α, interleukin 6 (IL-6), IL-1α, or IL-1β.

18. The method of claim 14, wherein the target cell comprises a recombinant nucleic acid construct comprising a nucleotide sequence that encodes a protein

having an amino acid sequence identified by SEQ ID NO: 2 operatively linked to a control sequence, wherein target cells produce FoxM1B protein thereby.

19. The method of claim 18, wherein the nucleotide sequence is identified by SEQ ID NO: 1.

20. The method of claim 18, wherein the recombinant nucleic acid construct is a vector.

21. The method of claim 20, wherein the recombinant nucleic acid construct is a viral vector.

22. The method of claim 21, wherein the viral vector is an adenovirus vector, an adeno-associated virus vector, a retrovirus vector, herpes simplex virus vector, or vaccinia virus vector.

23. The method of claim 18, wherein the recombinant nucleic acid construct is delivered to the target cell within a liposome.

24. A method of treating diseases or disorders associated with premature aging comprising the step of inducing expression, nuclear localization, or both expression and nuclear localization of FoxM1B protein in a target cell.

25. The method of claim 24, wherein the expression, nuclear localization, or both expression and nuclear localization of FoxM1B is induced by contacting the target cell with a growth factor or a cytokine.

26. The method of claim 25, wherein the growth factor is human growth hormone, hepatocyte growth factor, epidermal growth factor, transforming growth factor α, or a growth factor that induces Ras-MAP kinase signaling.

27. The method of claim 25, wherein the cytokine is tumor necrosis factor α, interleukin 6 (IL-6), IL-1α, or IL-1β.

28. The method of claim 24, wherein the target cell comprises a recombinant nucleic acid construct comprising a nucleotide sequence that encodes a protein having an amino acid sequence identified by SEQ ID NO: 2 operatively linked to a control sequence, wherein target cells produce FoxM1B protein thereby.

29. The method of claim 28, wherein the nucleotide sequence is identified by SEQ ID NO: 1.

30. The method of claim 28, wherein the recombinant nucleic acid construct is a vector.

31. The method of claim 30, wherein the recombinant nucleic acid construct is a viral vector.

32. The method of claim 31, wherein the viral vector is an adenovirus vector, an adeno-associated virus vector, a retrovirus vector, herpes simplex virus vector, or vaccinia virus vector.

33. The method of claim 28, wherein the recombinant nucleic acid construct is delivered to the target cell within a liposome.

34. The method of claim 24, wherein a full-length or less than full-length FoxM1B gene is introduced into the target cell prior to inducing expression and nuclear localization of FoxM1B protein.

35. A method of preventing or amelioriating the effects of lung injury comprising the step of inducing expression, nuclear localization, or both expression and nuclear localization of FoxM1B protein in a lung cell.

36. The method of claim 35, wherein the expression, nuclear localization, or both expression and nuclear localization of FoxM1B is induced by contacting the target cell with a growth factor or a cytokine.

37. The method of claim 36, wherein the growth factor is human growth hormone, hepatocyte growth factor, epidermal growth factor, transforming growth factor α, or a growth factor that induces Ras-MAP kinase signaling.

38. The method of claim 36, wherein the cytokine is tumor necrosis factor α, interleukin 6 (IL-6), IL-1α, or IL-1β.

39. The method of claim 35, wherein the target cell comprises a recombinant nucleic acid construct comprising a nucleotide sequence that encodes a protein having an amino acid sequence identified by SEQ ID NO: 2 operatively linked to a control sequence, wherein target cells produce FoxM1B protein thereby.

40. The method of claim 39, wherein the nucleotide sequence is identified by SEQ ID NO: 1.

41. The method of claim 39, wherein the recombinant nucleic acid construct is a vector.

42. The method of claim 41, wherein the recombinant nucleic acid construct is a viral vector.

43. The method of claim 42, wherein the viral vector is an adenovirus vector, an adeno-associated virus vector, a retrovirus vector, herpes simplex virus vector, or vaccinia virus vector.

44. The method of claim 39, wherein the recombinant nucleic acid construct is delivered to the target cell within a liposome.

45. The method of claim 35, wherein a full-length or less than full-length FoxM1B gene is introduced into the target cell prior to inducing expression and nuclear localization of FoxM1B protein.

46. A method of stimulating lung regeneration in a mammal, comprising the step of contacting lung cells in the mammal with growth factor or a cytokine, wherein the lung cells express FoxM1B protein.

47. The method of claim 46, wherein the lung cells comprise a recombinant nucleic acid construct comprising a nucleotide sequence that encodes a protein having an amino acid sequence identified by SEQ ID NO: 2 operatively linked to a control sequence into the lung cells, whereby the lung cells express FoxM1B protein.

48. The method of claim 47, wherein the nucleotide sequence is identified by SEQ ID NO: 1.

49. The method of claim 47, wherein the recombinant nucleic acid construct is a vector.

50. The method of claim 49, wherein the recombinant nucleic acid construct is a viral vector.

51. The method of claim 50, wherein the viral vector is an adenovirus vector, an adeno-associated virus vector, a retrovirus vector, herpes simplex virus vector, or vaccinia virus vector.

52. The method of claim 47, wherein the recombinant nucleic acid construct is delivered to the lung cell within a liposome.

53. The method of claim 46, wherein the mammal is a human.

54. A method of stimulating lung regeneration comprising the steps of:

a. isolating lung cells from a first mammal;

b. introducing a recombinant nucleic acid construct comprising a nucleotide sequence that encodes a protein having an amino acid sequence identified by SEQ ID NO: 2 operatively linked to a promoter sequence into the lung cells, whereby the lung cells express FoxM1B protein;

c. introducing the lung cells that express FoxM1B protein into a second mammal; and

d. administering to the second mammal an amount of a growth factor a cytokine sufficient to induce nuclear localization of the FoxM1B protein in the lung cells.

55. The method of claim 54, wherein the nucleotide sequence is identified by SEQ ID NO: 1.

56. The method of claim 54, wherein the lung cells expressing FoxM1B protein are reintroduced into first mammal, and the first mammal is treated with an amount of growth factor a cytokine sufficient to induce expression and nuclear localization of the FoxM1B protein in the lung cells.

57. The method of claim 56, wherein the recombinant nucleic acid construct is a vector.

58. The method of claim 57, wherein the recombinant nucleic acid construct is a viral vector.

59. The method of claim 58, wherein the viral vector is an adenovirus vector, an adeno-associated virus vector, a retrovirus vector, herpes simplex virus vector, or vaccinia virus vector.

60. The method of claim 56, wherein the recombinant nucleic acid construct is delivered to the lung cell within a liposome.

61. The method of claim 54, wherein the first mammal is a human and wherein the second mammal is a human.

62. A method of screening for compounds that can prevent or amelioriate the effects of an age-related disease or age-related proliferation disorder in a patient comprising the steps of:

a. contacting a plurality of cells that comprise a full-length FoxM1B gene or a less then full-length FoxM1b gene, wherein the cells do not express FoxM1B protein under conventional culture conditions, with a candidate compound;

b. assaying FoxM1B localization in the cells; and

c. identifying a candidate compound when FoxM1B is localized in the nuclei of cells contacted with the compound but not localized in the nuclei of cells not contacted with the compound.

63. The method of claim 62, wherein the less than full-length FoxM1B gene comprises a nucleotide sequence identified by SEQ ID NO: 1.

64. A method of screening for compounds that can prevent or amelioriate the effects of an age-related disease or age-related proliferation disorder in a patient comprising the steps of:

a. contacting a plurality of cells that comprise a full-length FoxM1B gene or a less than full-length FoxM1B gene, wherein the cells do not express FoxM1B protein under conventional culture conditions, with a candidate compound;

b. assaying expression of cyclin dependent kinase inhibitors $p21^{Cip1}$ (p21) and $p27^{Kip1}$ (p27), and mitosis promoting cdc25B phosphatase in the cells; and

c. identifying a candidate compound if p21 and p27 protein levels are decreased while cdc25B protein levels are increased in cells contacted with the compound compared with cells not contacted with the compound.

65. The method of claim 64, wherein the less than full-length FoxM1B gene comprises a nucleotide sequence identified by SEQ ID NO: 1.

66. A method of screening for compounds that can induce lung regeneration comprising the steps of:

a. contacting a plurality of cells that comprise a full-length FoxM1B gene or a less than full-length FoxM1B gene, wherein the cells do not express FoxM1B protein under conventional culture conditions, with a candidate compound;

b. assaying FoxM1B localization in the cells;

c. selecting a candidate compound when FoxM1B is localized in the nuclei of cells contacted with the compound but not localized in the nuclei of cells not contacted with the compound; and

d. identifying a compound as a compound that can induce lung regeneration when lung cells are induced to proliferate when contacted with the compound *in vitro* or *in vivo*.

67. The method of claim 66, wherein the less than full-length FoxM1B gene comprises a nucleotide sequence identified in SEQ ID NO: 1.

68. A method of screening for compounds that induce nuclear localization of FoxM1B protein, comprising the steps of:

a. contacting a cell with a compound, wherein the cell expresses a green fluorescent protein-FoxM1B (GFP-FoxM1B) fusion protein;

b. detecting localization of the GFP-FoxM1B protein in the cells; and

c. identifying a compound as a compound that induces FoxM1B localization if the GFP-FoxM1B protein is localized in the nuclei of the cells.

69. A method of screening for compounds that induce nuclear localization of FoxM1B protein, comprising the steps of:

a. contacting a transgenic mouse with a compound, wherein the cells of the transgenic mouse express a green fluorescent protein-FoxM1B (GFP-FoxM1B) fusion protein;

b. detecting localization of the GFP-FoxM1B protein in a cell removed from the mouse; and

c. identifying a compound as a compound that induces FoxM1B localization if the GFP-FoxM1B protein is localized in the nuclei of the cell that is removed from the mouse.

70. A method of treating or preventing symptoms associated with aging comprising the step of introducing a recombinant nucleic acid construct that comprises a nucleotide sequence identified by SEQ ID NO: 1 into target cells, thereby restoring proliferative potential of the target cells.

71. A method of preventing or amelioriating the effects of an age-related disease or age-related proliferation disorder in a patient comprising the step of introducing a recombinant nucleic acid construct that comprises a nucleotide sequence identified by SEQ ID NO: 1 into target cells, thereby restoring proliferative potential of the target cells.

72. A method of treating diseases or disorders associated with premature aging comprising the step of introducing a recombinant nucleic acid construct that comprises a nucleotide sequence identified by SEQ ID NO: 1 into a target cell, thereby restoring proliferative potential of the target cell.

73. A method of preventing or ameliorating the effects of lung injury comprising the step of introducing a recombinant nucleic acid construct that comprises a nucleotide sequence identified by SEQ ID NO: 1 into lung cells, thereby restoring proliferative potential of the lung cells.